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ABSTRACT

As an extension of previous work on perceived quality of life, this study investigated some possible effects of high school grade level (10th and 12th) and sex on perceived quality of school life. In addition, effects and relationships of these variables on/to academic achievement were investigated. The total sample was 63 rural high school students, 31 in the 10th grade (12 males and 19 females) and 32 in the 12th grade (15 males and 17 females). The Child-Parent Relationship Scale (CPRS), the Quality of School Life Scale (QSL), and grade-point averages were used in bivariate correlational analyses of variables. Based on the correlational analyses, seniors and females were more positively oriented toward school and the positive orientation was significantly associated with higher grade-point averages. The quality of family life as inferred from the QFL scales seemed particularly associated with achievement, especially for females. The analyses of variance also depicted the relatively high achievement orientation of those who more positively perceived their homes and the school. The perceived quality of family life was low, especially for the 10th-grade females. The general attitude toward school differed between the 10th- and 12th-grade students, in favor of the latter. (AN)

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# Perceived Quality of Life and High School Achievement: The Unhappy Sophomore

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Perceived Quality of Life and High School

Achievement: The Unhappy Sophomore

Each person develops in a multifaceted setting. Early, e.g., Freudian, conceptions of development placed primary emphasis on family influences. Post-Freudian concepts of development have tended to emphasize a broader view of societal influences. Both Freudian and later developmental frameworks bespeak important influences from the institutions of the family and of the school (Wiggins, et. al., 1976). Both naive observation as well as systematic observation (Sanford, 1966; Rappoport, 1972; McCormack & Halpin, Note 1) lead one to confirm these social settings as important influences on development.

The work of McCormack & Halpin (Note 1) suggested that little research had been accomplished on children's perceptions of the quality of life, where quality of life refers to perception (positive and/or negative) of family interaction and to perception of school life. In addition, they pointed to the family as a primary determinant and to the school as a secondary determinant of children's value structures. A search of the literature of the 1970s yielded only three relevant studies. DiMarco (1974) attempted to explore some effects of teacher-student life styles and student life style learning structure congruences on students' attitudes toward the teacher and the class. High school students' positive attitudes were directly related to teacher-student shared values. Students' attitudes toward the classroom were directly related to the degree to which the structure fitted their life style; a balance of direction, interaction with others, and freedom to pursue one's own interests was preferred.

Lueptow (1975) found achievement values of females higher than those of males at the high school level; achievement values were also related to the parental variables of socioeconomic status and size of residence. Johnson & Ahlgren (1976) studies some effects of cooperativeness and competitiveness on students' attitudes toward a variety of school variables. Cooperativeness was consistently related to a broad range of positive attitudes toward school at all grade levels from grade two to grade twelve. Competitiveness was related to positive attitudes toward school only at the high school level.

The present research stems from the continuing dearth of publication on children's perceptions of the quality of their lives. The absence of such research is particularly evident where rural students were involved. An instrument for measuring perception of the quality of home life, the Child-Parent Relationship Scale (CPRS) (Swanson, 1950), has been available for some time. The amount of research using the CPRS apparently has been limited. Further, the CPRS was normed on urban children--in Cook County (Chicago) Illinois and in Pittsburgh, Pennsylvania--and use with rural children is not well-established. A line of research on children's perceptions of the quality of their school lives was introduced by Epstein & McPartland (1976) through their Quality of School Life Scales (QSL). The QSL norm group contained only 12 to 14 percent rural high school students (Epstein and McPartland, 1978). While the QSL authors indicated that the scales were not strongly related to social class or standardized test scores, their relationship to grades achieved appears yet to be determined. Further, the relationship of perceptions of home/family life to grades achieved has not been extensively researched.

Some school-related attitudes, then, have been studied; these, in turn, have been related to familial attitudes and socioeconomic variables. None of the previously mentioned studies tapped relationship of familial or school-related attitudes on immediate achievement. As a possible extension of previous work on perceived quality of life, this study was to investigate some possible effects of high school grade level (10th and 12th) and sex on perceived quality of family life and perceived quality of school life. In addition, effects and relationships of these variables on/to academic achievement (high school grades) were investigated.

## Procedure

Subjects: The target population was high school students from a rural school. Based on research cited earlier, the largest research void appeared to be with rural high school students. The tenth and twelfth grades were arbitrarily selected. Approval for the research project was obtained from the superintendent of a school system containing a rural high school. The research was described to all 10th-grade and 12th-grade students by the junior author. Consistent with ethical procedures for research with human subjects (APA, 1973), permission was sought from the student or parent as appropriate. Further, prospective subjects were informed that they could withdraw from the project at any time, if they so desired.

The total N was 63. Of this number 31 were in the 10th grade, 12 males and 19 females; 32 were in th 12th grade, 15 males and 17 females. We had hoped to include race as a variable, but all except five of the students were white and only one 12th-grade subject was black. This small number of black students was considered too small to provide a base for meaningful analysis. All 12th-grade students except two participated. About half of

the 10th-grade students participated. The 10th-grade students who did participate were considered representative of the total class: Male-female participation was proportionate to the total group; grade-point averages of participants did not differ from those of non-participants; although race was not a variable of analyiss, all black 10th-grade students participated; no obvious break by socioeconomic status was evident. Whiel measures of socioeconomic status were not taken, subjective estimation suggested that the 12th-grade group was of higher status than the 10th-grade group.

Instruments/Measures: The Child-Parent Relationship Scale (CPRS) was used to measure students' perceptions of quality of family life. Description and properties of the CPRS may be found in Swanson (1950) and McCormack & Halpin (Note 1). Briefly, the CPRS is a 50-item, True--False--Not Sure response mode, instrument. Unfavorable responses (dissatisfaction or negative attitude) are weighted as two, "not sure" responses as one, and favorable responses as zero. Hence, higher scores reflect greater dissatisfaction with quality of family life. The instrument may be scores to yield two subscale scores and a total score. This scoring procedure was used yielding three scores: (1) reaction to the family in general (SAF), 14 items, possible score range of 0 to 28; (2) relationship with parents (PAT), 36 items, possible score range of 0 to 72; (3) total Quality of Family Life (QFL), the sum of the SAF and PAT scores.

The Quality of School Life Scale (QSL) (Epstein & McPartland, 1976) was used as an estimate of the students' reactions to school. The QSL may be scored to yield three subscale scores and a total score: (1) satisfaction with school in general (SAF), possible score range of 0 to 5; (2) attitude toward teachers (TCH), possible score range of 0 to 11; (3)

commitment to classwork (COM), possible score range of 0 to 11; and (4) a total QSL score, the sum of scores on the three subscales. The scoring system is simply to sum the number of positive responses made for each of the subscales' items, then sum the total number of positive responses for the total QSL. Hence, the higher scores reflect the greater satisfaction.

High school grade-point averages were provided by the junior author for each subject. Grade-point averages were computed through the fall semester; the seniors' averages were on seven semesters' work and the sophomores' averages were on three semesters' work.

All data were stored on discs. Analyses were accomplished using the programs of SPSS (Nie, et. al., 1975) and MINITAB (Ryan, et. al., 1976). Tests of statistical significance were at the .05 level.

## Results

Bivariate correlational analyses of variables for the entire sample yielded little. The QSL and QFL scales were not significantly correlated. Of the non-categorical data, the SAT subscale of the QSL and GPA were significantly related (.334, $p < .01$). Except for intercorrelation of scales of the same instrument, no other significant correlations were found.

To investigate further relationships which might occur, the data were correlated separately for females and for males. For the non-categorical variables, no significant correlations were found for males. The analyses for females did yield some significant correlations: The PAT subscale of the QFL was significantly related to the TCH subscale (-.344, $p < .05$) and to the QSL scale (-.332, $p < .05$); GPA was significantly related to the SAT subscale (.345, $p < .05$), the SAF subscale (-.358, $p < .05$), the PAT subscale (-.519, $p < .01$), and the QFL scale (-.506, $p < .01$). The correlational

analyses further suggested a more positive orientation toward school for females than for males and for 12th-grade students than for 10th-grade.

Two by two analyses of variance were performed with grade level (10th, 12th) and sex (male, female) as independent categorical variables and the subscale and total scores on the QSL and QFL as well as GPA as dependent variables.

No significant main effects nor interaction effects were found for the TCH or COM subscales of the QSL nor for the total QSL. In the case of the TCH subscale, a trend ($p. = .06$) toward a main effect of grade level was noted (10th grade level, $\bar{x} = 6.19$; 12th grade level, $\bar{x} = 7.34$). This may be a function of the relatively more positive attitude of 12th-grade females as compared to subjects whose scores fell in the other cells of the design.

The analysis for the SAT, general satisfaction subscale of the QSL yielded a significant main effect of grade level (10th-grade, $\bar{x} = 2.10$; 12th grade, $\bar{x} = 3.06$) and a significant grade x sex interaction. The interaction

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effect appeared to be a function of the diversity of scores between the 10th-grade females ($\bar{x} = 1.68$) and 12th-grade females ($\bar{x} = 3.65$).

The analyses of the QFL and its subscales were more fruitful. The analysis of the data on the SAF, reaction to family in general subscale of the QFL, yielded no significant main effect nor interaction. A trend ($p. = .08$) toward a grade x sex interaction was noted. This was likely a function of relatively higher (reflecting more dissatisfaction) scores for females and especially for 10th-grade females.

The analysis of the PAT, relations with parents subscale of the QFL, yielded a significant main effect of sex. Higher scores (reflecting more dissatisfaction) were found for females ($\bar{x}$ = 29.97) than for males ($\bar{x}$ = 14.93).

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No significant grade level effect nor grade level x sex interaction was noted.

The analysis of the QFL, total Quality of Family Life Scale, yielded a significant main effect of grade level. The higher scores (reflecting more dissatisfaction) were found for 10th-grade students ($\bar{x}$ = 37.23) than for

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12th-grade students ($\bar{x}$ = 27.41). No significant grade level effect nor grade level x sex interaction was noted.

Analysis of the GPA data yielded three significant Fs. Grade-point averages for 12th-grade students ($\bar{x}$ = 2.66) were higher than for 10th-grade students ($\bar{x}$ = 2.29); grade-point averages were higher for females ($\bar{x}$ = 2.38) than for males ($\bar{x}$ = 2.21). The interaction effect seemed largely a function of the relatively high grades for 12th-grade females ($\bar{x}$ = 2.90) and the relatively low grades of 10th-grade males ($\bar{x}$ = 2.00).

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To study more directly the effects of the QJL and QFL on achievement, these scale scores and subscale scores were ranked and divided, approximately, into thirds (1/3). The top 1/3 and bottom 1/3 were then used as

categorical independent variables in doing a sex x grade level x appropriate scale 1/3 category analysis of variance with GPA as the dependent variable.

The results of the three-way analyses of variance (grade level x sex x hi-lo score(s)) using grade-point average as the dependent variable may be summarized as follows. No significant main effects nor interactions were found involving the QSL total score nor for the COM or TCH subscale scores. No significant main effect nor interaction was found for the SAF subscale of the QFL. A main effect was found for the PAT subscale of the QFL; a grade level (10th - 12th) x PAT interaction effect was significant at the .085 level. A total QFL trend ($p = .09$) on total score was found.

The effects of quality of family life on achievement, high school grade-point average, reflected influence from attitude toward parents (PAT subscale of the QFL). Students who were in the lo-PAT score group had higher grades ($N = 21$; $\bar{x}$ GPA = 2.63) than students who were in the hi-PAT

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score group ($N = 23$; $\bar{x}$ GPA = 2.38). Note, again, that high PAT scores indicat greater dissatisfaction. The grade level (10th - 12th) trend ($p = .085$) seemed large a function of dissatisfaction at the 10th-grade level and high grades at the 12th-grade level.

The trend effect of total QFL scores on GPA was in the expected direction. Grade-point averages for high-scorers (high dissatisfaction ($\bar{x}$ GPA = 2.50) were lower than grade-point averages for low-scorers ($\bar{x}$ GPA = 2.63)

The analysis of the satisfaction with school in general subscale (SAT) of the QSL yielded a SAT main effect. Students in the high-score group had

higher grades ($\bar{x}$ GPA = 2.77) than students in the low-score group ($\bar{x}$ GPA = 2.37).

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The positive feeling toward school in general apparently was associated with an enhancing effect on grade-point average.

## Discussion

Based on the correlational analyses, seniors and females were more positively oriented toward school. The positive orientation was significantly associated with higher grade-point averages. The quality of family life as inferred from the QFL scales seemed particularly associated with achievement, especially for females.

The analyses of variance also depicted the relatively high achievement orientation of those who more positively perceive their homes and the school. The perceived quality of family life was low, especially for the 10th-grade females. The general attitude toward school differed between the 10th and 12th-grade subjects, in favor of the latter.

A comparison of the QSL data in this study with norm data in the QSL Manual is of interest. Although statistical tests were not made, the present scores tend to be higher than those reported in the Manual, at least in terms of absolute numbers. This could, of course, be a function of social desirability of responses for the present sample as well as a reflection of genuine liking of the school environment. Further, the Manual data show score trends from fifth through 12th grades, as well as in high school only. Scores on the SAT, COM, and QSL for the norm group show a decrease from grades 9 to 12 while the TCH scores show an increase. In the case of

the present sample this pattern was not generally the case. For the most part, the present data reflected increasing positive affect between 10th and 12th grades, as is expected for the TCH subscale. The present data may suggest the current sample shows peak dissatisfaction, especially for females, at the 10th grade level with subsequent increase in positive orientation. The bases for this are speculative: perhaps it is a function of different groups; perhaps the comparison level for 10th and 12th grade students differ--for the 10th grade student, "anything" may seem better, but for the 12th grade student the reality of leaving school may result in the perception that school is better than some alternatives, e.g., graduation, work, college, adulthood, etc.

Beyond the analyses of scores by grade level and by sex, the effects of the QFL and QSL scales and their subscales on grade-point averages were few. A general feeling of satisfaction with school seemed to have some effect on improving grades; the attitude toward teachers or commitment to classwork apparently added little to performance.

The importance of family interaction was further substantiated in this study. Relationship with parents produced an effect on grade-point average. Further, from the trend effect in analysis of data on reaction to the family in general, a reasonable inference seems to be that affect associated with the family does influence school performance and that much of the family effect stems from parent-child relationships.

The students involved in this study seemed reasonably positively oriented to their school; this was inferred from the relatively high scores on the QSL and its subscales. The general positive orientation may account for the lack of score differences by grade level and by sex and for the lack of effect on

grade-point averages of attitudes toward the school. The students did vary on attitudes toward family life. The most obvious attitudinal effect appeared as the -- especially female -- "unhappy sophomore."

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Table 1

ANOVA of Sex and Grade Level on General Satisfaction with School (SAT)

| Source | df | MS | F | p |
|---|---|---|---|---|
| Main Effects | | | | |
| Grade | 1 | 14.925 | 4.78 | .033 |
| Sex | 1 | .287 | .092 | .762 |
| Interaction | | | | |
| Grade x Sex | 1 | 20.460 | 6.566 | .013 |
| Residual | 59 | 3.116 | | |

Table 2

ANOVA of Sex and Grade Level on Attitude Toward Parents (PAT)

| Source | df | MS | F | p |
|---|---|---|---|---|
| Main Effects | | | | |
| Grade | 1 | .586 | 1.204 | .277 |
| Sex | 1 | 4.930 | 10.128 | .002 |
| Interaction | | | | |
| Grade x Sex | 1 | 1.002 | 2.058 | .157 |
| Residual | 59 | .487 | | |

Table 3

ANOVA of Sex and Grade Level on Quality of Family Life (QFL)

| Source | df | MS | F | p |
|---|---|---|---|---|
| Main Effects | | | | |
| Grade | 1 | 6277.798 | 7.895 | .007 |
| Sex | 1 | 1477.021 | 1.858 | .178 |
| Interaction | | | | |
| Grade x Sex | 1 | 126.376 | .159 | .692 |
| Residual | 59 | 795.158 | | |

Table 4

ANOVA of Sex and Grade Level on

Grade-Point Average (GPA)

| Source | df | MS | F | p |
|---|---|---|---|---|
| Main Effects | | | | |
| Grade | 1 | 12.251 | 4.868 | .031 |
| Sex | 1 | 27.141 | 10.784 | .002 |
| Interaction | | | | |
| Grade x Sex | 1 | 16.366 | 6.503 | .013 |
| Residual | 59 | 2.517 | | |

Table 5

ANOVA of Sex, Grade Level, and Attitude Toward Parents on Grade-Point Average

| Source | df | MS | F | p |
|---|---|---|---|---|
| Main Effects | | | | |
| Grade | 1 | 2.272 | 5.816 | .021 |
| Sex | 1 | 4.724 | 12.091 | .001 |
| PAT | 1 | 1.502 | 3.845 | .058 |
| 2-Way Interactions | | | | |
| Grade x Sex | 1 | .203 | .521 | .475 |
| Grade x PAT | 1 | 1.226 | 3.137 | .085 |
| Sex x PAT | 1 | .043 | .109 | .743 |
| 3-Way Interaction | | | | |
| Grade x Sex x PAT | 1 | .119 | .305 | .584 |
| Residual | 36 | .391 | | |

Table 6

ANOVA of Sex, Grade Level, and Satisfaction with School in General on Grade-Point Average

| Source | df | MS | F | p |
|---|---|---|---|---|
| Main Effects | | | | |
| Grade | 1 | 1.495 | 3.682 | .062 |
| Sex | 1 | 1.621 | 3.993 | .053 |
| SAT | 1 | 1.554 | 3.828 | .057 |
| 2-Way Interactions | | | | |
| Grade x Sex | 1 | .231 | .569 | .455 |
| Grade x SAT | 1 | .166 | .408 | .527 |
| Sex x SAT | 1 | .453 | 1.117 | .297 |
| 3-Way Interaction | | | | |
| Grade x Sex x SAT | 1 | .090 | .222 | .640 |
| Residual | 40 | .406 | | |